

Assessment of Co-relation between Sleeping Time and Blood grouping

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ABSTRACT

Objective of present questions related to sleeping time then we collect data accordance to their blood group. It was concluded from present studies that influence of blood group on sleeping time was maximum for A+ blood group and minimum for A- and AB-. Authors took sample of blood from person that posse's different blood group and then finding out blood group through this previous technique. Total 177 subjects were participated in this studies all these were students of Bahauddin Zakariya University from 18 to 22 age group. A questionnaire was prepared about sleeping time.

Keywords: Sleeping time; Phenotype; Rh factor; Red blood cells; Physical health; Mental health; Antigen A; Antigen B; Night; Fatigue.

1. Introduction

ABO blood group is type of multiple alleles. ABO blood group system was firstly discovering by Karl Land Steiner. ABO blood group has four different phenotypes which distinct from each other due to presence of specific antigen on surface of RBCs. If a person having antigen A its blood group is A. While a person having antigen B then its blood group is B. If a person having both antigen A and B on RBCs then blood group will be AB. A person having no antigen on RBCs then its blood group is O. ABO blood group system is encoded by a single polymorphic gene I on chromosome 9 and A phenotype having contains antibodies B in serum and agglutinate any RBCs with antigen A, while B phenotype contains anti-A antibodies in serum and phenotype AB neither anti A nor anti B antibodies in serum. ABO blood group is universal recipient while phenotype O absorbed by blood stream of recipient [1]. Rh blood group is defined on basis of Rh factor. It is special type of protein present on red blood cell. ABO blood group is differentiating into positive and negative sign. Rh blood group system encodes three types of genes C, D, E. If a person having Rh factor on red blood cells then its blood group is positive respectively A+, B+, AB+ and O+. While Rh factor is not present on red blood cells of person then its blood group is negative. Basically it has been seen in rhesus monkey [2].

Sleep is a naturally recurring state of body and mind, characterized by consciousness relatively inhibited by sensory activity. Sleep occurs in repeating periods in which the body alternates between two distinct modes REM and non REM. Although it helps in anabolic state, helps to restore immune nervous, muscular and skeleton system these are vital process that cognitive function plays large role in the function of internal endocrine and immune system. The internal circadian clock promotes daily sleep at night. Human suffers from various sleeping disorders. Many people have different sleeping time [3]-[5].

1.1. Study Objectives

Objective of present studies were: (1) To determine the ABO blood grouping; (2) To determine the Rh blood grouping; (3) To know the sleeping time; (4) To show influence of blood group on sleeping time; (5) To know the any difference of blood grouping affiliated sleeping time between male and female.

2. Materials and Methods

Blood sample, glass slide, and needle, antibodies A, B and D.

Take sample of blood from person and put drops of blood on glass slide then add antibodies A on antigen now put one drop of antibodies B serum on drop of blood. Then add one drop of D gene on blood drop that differentiate presence of Rh protein on RBCs. If clots form on which portion where is B antibodies then blood will be B and Rh factor is present and granular bodies form then blood group is B+. I took sample of blood from person that posses' different blood group and then find out blood group through this previous technique. A total of 176 subjects were participated in these studies.

A questionnaire was prepared about sleeping time. We ask questions related to sleeping time then we collect data accordance to their blood group, different result we obtained during that survey mostly people used to sleep early than other people those having different blood group.

2.1. Statistical Analysis

Statistical analysis was performed by using MS Excel.

3. Result and Discussion

A+ blood group has maximum mean 13.2 while in O+ 12.2 blood group and minimum mean value of B-(girls), B+, O- (girls) and AB+. Value of mean in A-, AB- and O- (boys) blood group is zero.

Table 1. Influence of blood group on sleeping time

Blood Group	Boys (Mean +SD)	Girls (Mean +SD)
A+	13.2+2.7	11.9+1.2
A-	0+0	0+ 0
B+	11.7+1.0	11.1+ 1.8
B-	0+0	11+ 0
AB+	11.3+0	11.7+ 1.55
AB-	0+0	0+ 0
O+	12.2+1.5	11.5+ 1.55
O-	0+0	11.9+1.2

A questionnaire based studies has been given important out comes in current researches [6-10], blood group affects on your sleeping time. A blood group having high level of cortical which causes stress and adversely affect sleeping time while blood group B having disturbed sleeping pattern AB blood group should retain healthy life style they used to sleep earlier than O blood group. While the person possesses O blood group they used to sleep late night.

4. Conclusion

It was concluded from present studies that influence of blood group on sleeping time was maximum for A+ blood group and minimum for AB- and A- blood group.

5. Future Recommendations

Discovering the association between sleeping time and blood grouping could provide new insights into personalized health and wellness strategies. Research may reveal that different blood types could influence an individual's natural sleep cycles, quality of rest, and overall circadian rhythm.

Declarations

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Competing Interests Statement

The authors declare no competing financial, professional, or personal interests.

Consent for publication

The authors declare that they consented to the publication of this study.

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